

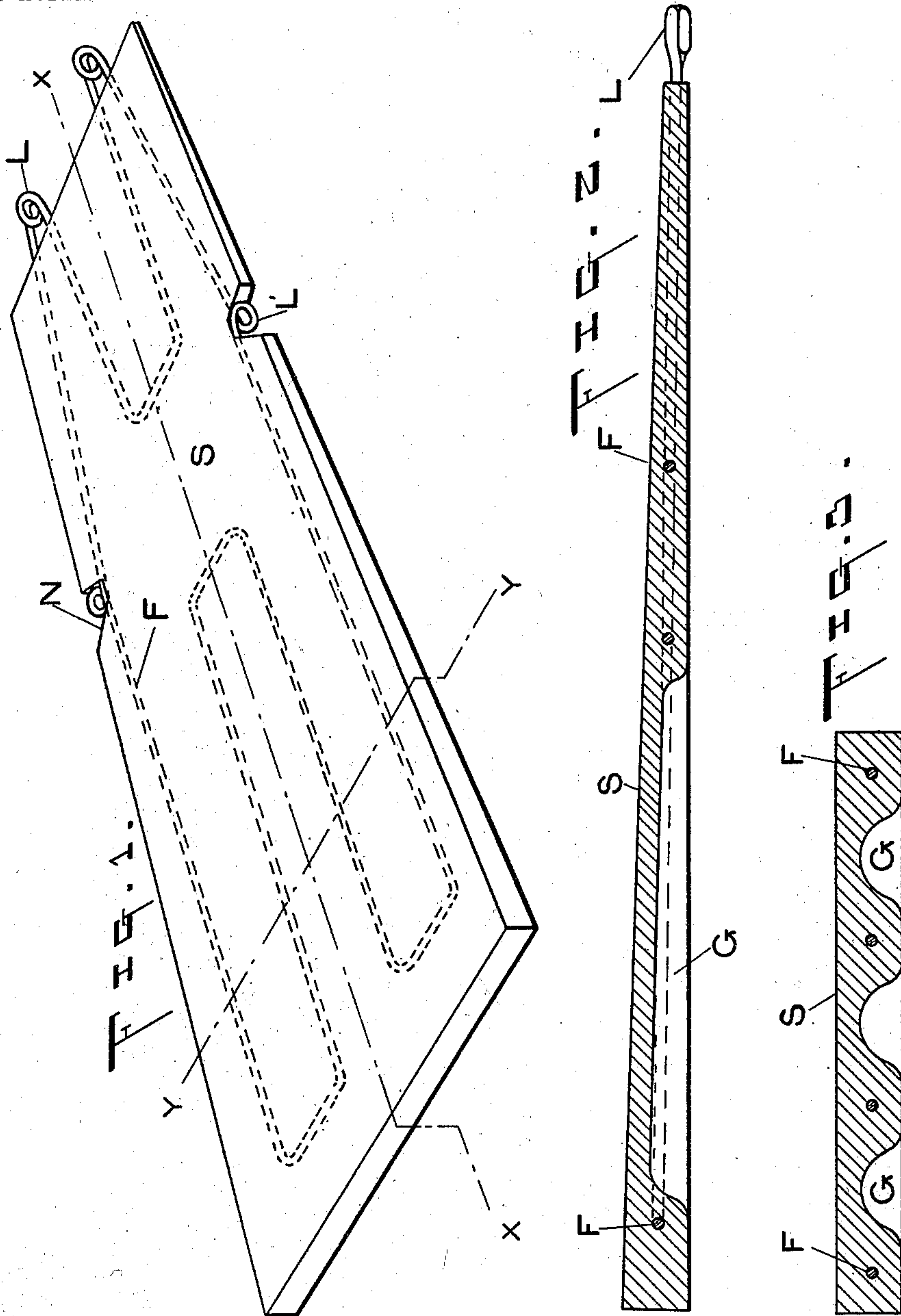
No. 748,141.

PATENTED DEC. 29, 1903.

G. C. ZWERK.  
CEMENT SHINGLE.

APPLICATION FILED JUNE 6, 1903.

NO MODEL.



WITNESSES:

*James C. Hanson*  
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# UNITED STATES PATENT OFFICE.

GEORGE C. ZWERK, OF SAGINAW, MICHIGAN.

## CEMENT SHINGLE.

SPECIFICATION forming part of Letters Patent No. 748,141, dated December 29, 1903.

Application filed June 6, 1903. Serial No. 160,384. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE C. ZWERK, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Cement Shingles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention is a molded shingle.

The objects of the invention are to make a shingle of plastic material, such as cement, having the shape of the common wooden shingle, molded upon a stiffening-frame, and lightened by coring out parts of the material and to provide the frame with projecting loops for attaching the shingle to the roof.

The accompanying drawings show the shingle, Figure 1 being a perspective view thereof; Fig. 2, a longitudinal section taken on the line *xx* of Fig. 1, and Fig. 3 a cross-section taken on the line *yy* of Fig. 1.

The shingle *S* is similar in form to the ordinary wooden shingle, being thicker at the bottom than at the top, so that the shingles will lie close down upon each other. It is reinforced by an inlaid frame of wire *F*, that may be of any suitable form, but is preferably of the form shown. Grooves *G* are formed in the under side between the longitudinal members of the frame, so that much material is saved and the shingle made lighter. The frame *F* is formed with projecting loops *L* at the top, and openings *N* are formed in the sides of the shingle to receive similar loops *L'*. The nails for securing the shingles to the roof are driven through the loops *L* and *L'*, and thus the shingles are firmly secured to the roof without causing any strain in the shingle.

One of the serious difficulties encountered in the use of slate and many forms of tile for roofing is the breakage by nails driven through them. There is always a little clearance between the slate and boards of the roof on account of the uniform thickness of the overlapping slate, and if the nails are driven the least bit too tight the slate is broken. This difficulty is entirely overcome in my

shingle by the use of the loops *L* and *L'*, as the wire will bend enough to let the nails be drawn tight without the danger of breaking the shingle.

The shingle thus produced is light, serviceable, and easily applied, is well reinforced, and may be securely nailed down without danger of breaking.

What I claim as my invention, and desire to secure by Letters Patent, is as follows:

1. A tapered shingle of plastic material molded upon a wire reinforcing-frame, said frame being formed with loops projecting from the thin upper edge of the shingle and adapted to receive nails for securing the shingle to the roof.

2. In a molded shingle provided with openings, the combination of longitudinal reinforcing-wires embedded in the shingle, and metal loops formed in said wires, registering with said openings and adapted to receive nails for securing the shingle to the roof.

3. In a cement shingle, a metal frame molded within the shingle and extending lengthwise thereof, grooves formed in the under side of the shingle between the members of said frame, projecting loops at the edges of the shingle adapted to receive nails for securing the shingle to the roof; said shingle being formed with recesses to receive said loops, substantially as described.

4. A shingle formed of plastic material molded upon a reinforcing-frame and provided with openings, said frame being formed with loops adapted to receive nails for securing the shingle to the roof, substantially as described.

5. A tapered shingle of plastic material molded upon a wire reinforcing-frame, said frame being formed with loops projecting from the shingle and adapted to receive nails for securing the shingle to the roof, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE C. ZWERK.

Witnesses:

JAMES C. HANSON,  
A. A. EASTERLY.